

Remarks

Applicants have received and carefully reviewed the Office Action mailed October 30, 2007. Claims 1 and 3-20 have been amended. Support for the amendments is found in the specification, claims, and drawings as originally filed. No new matter has been added. Reconsideration and allowance of the pending claims are respectfully requested.

Oath/Declaration

The Examiner has objected to the oath/declaration because the statement regarding disclosure of information material to patentability is missing. A substitute declaration is filed herewith. In place of the deceased inventor James Pagliuca, the declaration has been signed by Gene DiPoto on behalf of the assignee. Gene DiPoto has signing authority as shown on the Power of Attorney filed August 13, 2007. James Pagliuca assigned to Endius Incorporated as shown in the Assignment recorded at Reel 014861/Frame 0427.

Rejection under 35 U.S.C. § 102(b), (e)

Claims 1, 3-5, 7 and 9 are rejected as being anticipated by Zhu et al. (US 5,577,993). Independent claim 1, as amended, recites a surgical tool assembly, including an expandable tubular structure defining a path for receiving surgical instruments and a surgical tool structured to expand the tubular structure. Zhu et al. do not appear to teach such an assembly. The Examiner asserts that Zhu et al. teach an actuator 55 which is able to move the first and the second legs away from each other, referring to FIG. 4 for support. The Examiner also asserts that the actuator 55 as shown in FIG. 7 of Zhu et al. is able to move axially which moves the first and second legs away from each other. The Examiner points out that legs 54 have flared end portions along the tissue layers 27. Applicants respectfully traverse the rejection.

Zhu et al. do not appear to teach an expandable tubular structure and a surgical tool structured to expand the tubular structure. Zhu et al. appears to teach a trocar system 20 including a guide portion 52 and a pair of retractor blades 54 having handles 55. See column 7, lines 32-37. The trocar system of Zhu et al. appears to teach an expandable structure

(trocar 20), but does not appear to teach a surgical tool for expanding the trocar, but rather teaches the trocar itself as being manipulated via loops 56 to be expanded.

Zhu et al. teach element 55 as handles that, when moved axially, appear to move the entire device in a proximal direction to lift the abdominal wall, with the blades 54 together. See FIG. 2 and column 7, lines 31-37 and 49-52. Zhu et al. teach moving handles 55 away from each other (FIG. 9), toward each other (FIG. 6), and rotated (FIG. 5) independently, however such movements do not result in handles 55 being moved axially to move first and second legs away from each other, as is recited in independent claim 1. The Examiner appears to be asserting that the flared end portions of legs 54 is considered to be the legs moving away from each other. Applicants submit that such an interpretation is not supported by the teachings of Zhu et al. As is clearly shown in FIG. 7, Zhu et al. show that axial movement of handles 55 (via loops 56) results in the device being moved axially as a whole, with legs 54 together. Zhu et al. do not appear to teach each and every element of independent claim 1 or the claims dependent thereon, and thus cannot be deemed to anticipate the claims. Further, there is no motivation for one of ordinary skill in the art to modify the device of Zhu et al. to achieve the claimed surgical tool. Zhu et al. fail to teach each and every element in the same detail as recited in the claims and thus cannot be deemed to anticipate the claims. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 10-12 are rejected as being anticipated by Makower et al. (US 5,683,349). Independent claim 10, as amended, recites a surgical tool assembly including an expandable tubular structure and an elongate member structured to expand the tubular structure. Makower et al. do not appear to teach such a structure. Makower et al. appear to teach a retractor having articulated members 15 that are movably positioned and capable of holding and pulling tissue disposed beyond the distal end. See column 4, lines 22-25 and FIGS. 1-2. Makower et al. do not appear to teach an expandable tubular structure. Further, because the retractor of Makower et al. is specifically designed to retract tissue, there is no motivation for one of ordinary skill in the art to add an expandable tubular structure, as is recited in the claims. Makower et al. fail to teach each and every element in the same detail as recited in the claims and thus cannot be deemed to anticipate the claims. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 10-13, and 16-20 are rejected as being anticipated by Sherts (US 5,728,113). Independent claim 10, as amended, recites a surgical tool assembly including an expandable tubular structure and an elongate member structured to expand the tubular structure. Sherts et al. do not appear to teach such a structure. Sherts et al. appear to teach a suturing apparatus including a pair of handle members and a needle holding structure including jaw members. See column 2, lines 44-53 and FIG. 1. Sherts et al. do not appear to teach an expandable tubular structure. Further, because Sherts et al. appear to be directed to a suturing device structured to manipulate a needle to suture tissue, there is no motivation for one of ordinary skill in the art to add an expandable tubular structure as recited in claim 10 to the suturing apparatus of Sherts et al.

Regarding claims 12 and 16, the Examiner asserts that “contracting the handle 30 would cause the expansion of the first and the second jaws.” Sherts et al. actually teaches:

Thus, closing handles 30 toward handle portion 20 drives plate 48, and thus center rod 38, proximally thereby camming jaws 16 and 18 to a closed position, while opening handles 30 drives plate 48 distally to cause jaws 16 and 18 to be cammed into the open position.

Emphasis added; see column 6, lines 6-10. Sherts et al. thus appear to teach the opposite interaction between the handles and jaws as is recited in the claims. Sherts et al. further teach:

During certain surgical operations it is preferable that the jaws of suturing apparatus 10 be biased to an open position thereby requiring the operator to squeeze handles 30 together to move jaws 16 and 18 to a closed position.

Emphasis added; see column 6, lines 11-14. Again Sherts et al. appear to teach the opposite structure as is recited in the claims. Further, because Sherts et al. describe the structure of the jaws being biased open as being preferable, there is no motivation for one of ordinary skill in the art to modify Sherts et al. to achieve the claimed structure. Sherts et al. fail to teach each and every element in the same detail as recited in the claims and thus cannot be deemed to anticipate the claims. Reconsideration and withdrawal of the rejection are respectfully requested.

Rejection under 35 U.S.C. § 103(a)

Claims 6 and 8 are rejected as being unpatentable over Zhu et al. For at least the reasons set forth above, Zhu et al. do not appear to teach each and every element of independent claim 1, from which claims 6 and 8 depend. Further, there is no motivation for one of ordinary skill in the art to modify the device of Zhu et al. to achieve the device as claimed. Reconsideration and withdrawal of the rejection are respectfully requested.

Claims 14 and 15 are rejected as being unpatentable over Sherts et al. in view of Gerrone (US 5,312,351). For at least the reasons set forth above, Sherts et al. do not appear to teach the elements of independent claim 10, from which claims 14 and 15 depend. Gerrone does not appear to provide what Sherts et al. lack, thus even if one were to combine the teachings of Sherts et al. and Gerrone, one would not arrive at the invention as claimed. Further, there is no motivation for one of ordinary skill in the art to combine the teachings of Sherts et al. and Gerrone. The Examiner asserts that one would have been motivated to modify the device of Sherts et al. to include a depth limiter as taught by Gerrone to add additional safety and control to the instrument. Sherts et al. teach a suturing device designed to be inserted to the site of an incision and to manipulate a needle and suturing material to suture the incision. The use of such a device would not appear to be aided by a depth limiter as taught by Gerrone because the suturing device of Sherts et al. must be inserted to the site requiring suturing, regardless of the depth. Limiting the depth to which the Sherts et al. device can be inserted would appear to destroy the usefulness of the device. Sherts et al. thus appear to teach away from any combination with Gerrone. Reconsideration and withdrawal of the rejection are respectfully requested.

Reconsideration and reexamination are respectfully requested. It is submitted that, in light of the above remarks, all pending claims are now in condition for allowance. If a telephone interview would be of assistance, please contact the undersigned attorney.

Respectfully submitted,
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By their Attorney,

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